

Mineral Industry Surveys

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PRECIOUS METALS IN APRIL 2001

U.S. mines produced 18,500 kilograms (kg) of gold and 141,000 kg of silver in April 2001. Compared with March 2001, production of gold was up 26% in Alaska and down 11% in California, and silver production was down 22% in Nevada. Table 8 in this report lists the top 30 gold-producing mines for the first quarter in the United States in 2000.

Gold

Domestic.—The statue of Prometheus, which towers above the ice skating rink in Rockefeller Center (NY), received a new coat of gold. The statue was reguilded using 30,000 sheets of 23 ¾-karat double-weight German gold leaf. The 8-ton bronze statue was commissioned by John D. Rockefeller in 1933 (American Metal Market, 2001e).

New U.S. environmental regulations that would restrict the amount of heavy metals allowed to be discharged from gold and silver mines reportedly could close or severely limit operations in the Pacific Northwest. The Environmental Protection Agency has decided to implement the regulations, which have been in the draft process for more than a year (Platts Metals Week, 2001d).

International.—Gold Fields Ltd. joined forces with Mintek and AngloGold Ltd. in Project AuTek, a pioneering initiative in the exploration and development of new industrial uses for gold. Project AuTek, which was launched in June 2000, has focused on the application of gold in catalysts to combat air pollution by removing noxious gases (American Metal Market, 2001d).

The world's seventh largest gold producer, Australia's Normandy Mining Ltd., has entered into a strategic alliance with the world's fifth largest gold company by market capitalization, Canada's Franco-Nevada Mining Corp. Franco-

Nevada emerges with 19.9% of Normandy. Normandy emerges with \$48 million, all of Franco-Nevada's Australian production royalties, and the Midas property, which includes the Ken Snyder gold mine on the Carlin Trend in northern Nevada (American Metal Market, 2001a).

Sales taxes levied on gold commodities have affected the Egyptian gold market. Conflicting rumors concerning the possible reduction of the sales tax caused the market to stagnate. In addition, the gold market in Egypt faces fierce competition from neighboring countries where better quality gold commodities are sold at lower prices owing to the absence of taxes and fees on gold. Cases of commercial fraud have dramatically increased; the volume of gold traded on the market is almost triple the volume officially stamped by the authorities (American Metal Market, 2001b).

Zimbabwe's Falcon Gold Ltd. deferred the closure of its Dalny, Golden Quarry, and Venice gold mines. A rescue package came from the ministry of finance and the country's directors that guaranteed recovery of the huge cost needed to reopen the mines. Falcon Gold, which has been in operation over 100 years, produced 1,200 kg of gold in 2000, and employed about 1,000 people (American Metal Market, 2001f).

An independent company, Goldavenue.com, brought three other companies together to develop comprehensive information on gold at a web site for professionals and amateurs alike. The other companies are: AngloGold, Ltd.; J.P. Morgan; and Prodults Artistiques de Metaux (the world's largest gold refinery). The web site, located at goldavenue.com, contains information on gold in continuously updated sections that cover finance and markets, mining, jewelry, conferences, and seminars. Business-to-business

operations have been added with business-to-consumer products to be introduced later (American Metal Market, 2001c).

South Africa-based Komanani Mining (Pty) Ltd. bought a 10% share of Harmony Gold Mining Co. Ltd. The purchase makes Komanai the single largest shareholder of Harmony (Platts Metals Week, 2001c).

The London Bullion Market Association's gold clearing statistics rose to its highest level since February 2000. Gold transfers were up about 19% in comparison with those of the preceding month, rising to a daily average of 28.7 million ounces (893,000 kg). The daily average number of gold transfers rose from 830 to 954. In addition, the quantity of gold transferred in March 2001 was about 9% more than that of March 2000 (Platts Metals Week, 2001b).

Silver

On April 17, 2001, Vancouver-based Pan American Silver Corp. announced the initiation of mill production at the Huron silver-zinc mine in the Cerro de Pasco District of central Peru. At full scale production, Pan American expects to produce about 50,000 metric tons (t) of ore per month resulting in an annual output of 134 t of silver and 18,000 t of zinc metal in concentrates. Pan American acquired an interest in the Huron Mine in March 2000, expecting full-scale operations in March-April 2001. Operations at the mine ceased in 1998 after portions of the underground workings were flooded by a neighboring mine. The company also operates the Quiruvilca silver-zinc mine in Peru, where silver output totaled 3,600 t in 2000 (Pan American Silver Corp., 2001).

Platinum-Group Metals

Quaterra Resources Inc. and International Freegold Mineral Development Inc. have entered into a joint-venture agreement to explore further a platinum-group metals (PGM) prospect in southeast Alaska. The joint-venture encompasses International Freegold's Union Bay property plus additional recently staked ground in the area. The total area covers about 5,470 hectares. Reconnaissance mapping and sampling reportedly identified PGM mineralization associated with magnetite and/or chromite-bearing pyroxene units in at least three areas. Continuous 0.15 meter (m) rock-chip samples gave values of up to 17.3 grams per ton (g/t) of palladium and platinum, and an average for the 0.5 m sample width was 8.9 g/t. In 2001, Quaterra staked out adjacent ground, including an alluvial fan where previous pan sampling by the defunct U.S. Bureau of Mines returned values of up 19 g/t of platinum from a 16-pan composite sample. The Union Bay Igneous complex has been mapped as a sub-horizontal lopolith covering an area measuring 8 kilometers (km) by 5 km with a large pipe to the east composed mainly of dunite (Mining Journal, 2001).

South Africa-based Impala Platinum Corp. Ltd. acquired a 30% interest in Zimbabwe Platinum Mines' (Zimplats) Ngezi project and the Hartley Platinum joint venture for R240 million. Impala and South Africa's ABSA Bank have also bought a 30% stake in Zimplats from Delta Gold. According to Zimplats officials, the deal means that the Ngezi project can be given an immediate go-ahead with the first sale of PGM due

within the next year. The Ngezi open-cast mine is expected to produce 2.2 million metric tons per year of ore, which will be processed at the Selous Metallurgical Complex at the Hartley Platinum mine site, producing 6,500 kg of PGM contained in matte. This material will then be sent to Impala Refining Services in South Africa for refining and marketing. Impala is the second largest platinum producer in the world, with current mine production of about 31,100 kilograms per year (kg/yr) (Metal Bulletin, 2001a).

Norilsk Nickel confirmed that Russia's President has approved platinum and rhodium export quotas for 2001. Norilsk already has a ten-year export quota for palladium and will now be able to export the other two PGM on the basis of a one-year quota. The quantities involved, however, will remain unknown because Russian PGM production and export figures are classified (Metal Bulletin, 2001b).

Anglo American Platinum Corp. Ltd. of South Africa and London-based Lonmin plc have agreed in principle to develop a new PGM project called Pandora as an equal joint venture. The project, located near Brits in South Africa's North West Province, will exploit the UG2 reef of the Bushveld Igneous Complex. Anglo American is contributing the orebody and Lonmin, via wholly owned Lonplats, is contributing its adjacent infrastructure. Production will total 7,200 kg/yr of refined platinum and 3,400 kg/yr of refined palladium over a life of 30 years. The joint venture will use Eastern Platinum's existing infrastructure to gain swift underground access, and additional infrastructures will also be established. Eastern Platinum's existing concentrator will be expanded from 200,000 metric tons per month (t/mo) to 320,000 t/mo to allow the joint venture to achieve its full production target of 3.6 million metric tons of ore per year scheduled for mid-2007. Ore reserves total 130 Mt (Platts Metals Week, 2001a).

Update.—On May 30, 2001, the U.S. Mint announced that 2001 American Eagle Platinum Proof Coins would go on sale June 6th, featuring the 4th of the five-year Vistas of Liberty™ reverse designs. Effective June 12, 12:00 noon EDT, these coins were available for online orders at www.USMINT.gov. Prices for the coins will remain the same as last year: \$740 for the one-ounce; \$405 for the half-ounce; \$227 for the quarterounce; \$118 for the tenth-ounce; and \$1,375 for the three coin set (U.S. Mint, 2001).

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${\bf TABLE~1}$ MINE PRODUCTION OF RECOVERABLE GOLD AND SILVER IN THE UNITED STATES, BY STATE 1/

(Kilograms)

				Other	
Gold	Alaska	California	Nevada	States 2/	Total
2000:	_				
April	1,190	1,280	21,400	4,540	28,100
May	1,190	1,360	19,500	4,540	26,600
June	1,190	1,470	21,400	4,710	28,800
July	1,460	1,470	18,900	4,410	26,300
August	1,460	1,400	20,800	4,810	28,500
September	1,510	1,460	22,200	3,900	29,100
October	1,510	1,360	19,000	5,680	27,600
November	1,020	1,170	19,100	5,900	24,700
December	1,440	1,170	23,000	4,450	30,100
January-December p/	15,500	16,400	253,000	55,300	338,000
2001:	_				
January	1,440	1,370	22,000	4,500 r/	29,300
February	1,440	1,270 r/	19,700 r/	4,320	26,700 r
March r/	1,140	1,320	13,900	2,980	19,400
April	1,440	1,180	13,000	2,880	18,500
January-April	5,460	5,140	68,500	14,700	93,800
				Other	
Silver	Arizona	Idaho	Nevada	States 3/	Total
2000:					
April	W	35,200 r/	68,400 r/	71,600 r/	175,000 r
May	W	35,500 r/	77,400 r/	73,000 r/	186,000 r
June	W	35,200 r/	58,900 r/	73,500 r/	168,000
July	W	34,900 r/	57,400 r/	71,300 r/	164,000 r
August	W	34,800	53,200 r/	73,100 r/	161,000
September	W	34,500	60,900 r/	69,700 r/	165,000 r
October	W	34,500	45,900	56,700 r/	137,000 r
November	W	34,500	62,200 r/	66,400 r/	163,000 r
December	- W	34,500	61,200 r/	73,000 r/	169,000 r
January-December p/	W	416,000 r/	752,000 r/	848,000 r/	2,020,000 r
2001:	_				
January		20,300	41,200	76,500	138,000
February	W	20,300	42,500	66,400	129,000
March	W	W	45,300	85,500 r/	131,000 r
April	– W	W	35,400	106,000	141,000
January-April	W	40,600	164,000	334,000	539,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data, included with "Other States."

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Includes Arizona, Colorado, Idaho, Montana, New Mexico, South Carolina, South Dakota, Utah, and Washington.

^{3/}Includes Alaska, California, Colorado, Missouri, Montana, New Mexico, New York, South Carolina, South Dakota, Tennessee, Utah, Washington, and State indicated by symbol W.

TABLE 2 SELECTED PRECIOUS METAL PRICES

(Dollars per troy ounce)

	Gold	Silver	Platinum	Palladium
Engelhard Industries:	_			
2000:	_			
Low/date	264.90 (October 27)	4.59 (December 19)	416.00 (January 6)	437.00 (January 6)
High/date	313.88 (February 7)	5.53 (February 7)	625.00 (December 13 and 28)	985.00 (December 27)
Average	280.10	5.00	549.31	691.84
2001:				
March:	_			
Low/date	261.24/28	4.30/16	567.00/30	744.00/30
High/date	273.61/12	4.51/9	607.00/1	830.00/8 and 9
Average	264.13	4.40	587.82	790.55
April:				
Low/date	257.04/2	4.30/2	559.00/2	657.00/12
High/date	265.70/27	4.49/20 and 24	630.00/18	755.00/17
Average	261.69	4.40	598.55	704.65
May:				
Low/date	265.05/2	4.32/8	604.00/1	640.00/14
High/date	292.40/21	4.60/24	6.25/21 and 29	685.00/7
Average	273.15	4.44	613.82	663.41
Year to date:				
Low/date	257.04 (April 2)	4.30 (March 16 and April 2)	559.00 (April 2)	657.00 (April 2)
High/date	292.40 (May 21)	4.87 (January 30)	645.00 (January 10 and 15)	1,100.00 (January 26)
Average	265.73	4.50	606.11	839.51
Handy and Harman:				
2000	278.96	5.00	XX	XX
2001:				
March	263.03	4.40	XX	XX
April	260.56	4.39	XX	XX
May	272.07	4.44	XX	XX
Average year to date	264.64	4.50	XX	XX
London Final: 1/				
2000	279.04	4.95	XX	XX
2001:				
March	263.03	4.40	XX	XX
April	260.48	4.37	XX	XX
May	272.35	4.43	XX	XX
Average year to date	264.64	4.48	XX	XX
VV N-41:1-1-				

XX Not applicable.

1/ Silver price reported as "London Spot/US Equiv."

Source: Platts Metals Week.

TABLE 3 U.S. IMPORTS AND EXPORTS OF GOLD 1/

(Kilograms of gold content, unless otherwise specified)

	Ores and	Doré and	Refined	Ash and	T : 14/	Waste and scrap	Metal powder	Gold compounds
Period and country	concentrates 2/	precipitates	bullion 3/	residues	Total 4/	(gross weight)	(gross weight)	(gross weight)
Imports for consumption:	-	20,000	104.000	(0	222.000	20.800	6.700	7.070
2000 2001:	_ 65	39,000	184,000	60	223,000	29,800	6,720 r/	7,970
	-	1.250	16,000	2	10.100	2.470	799	222
January February	_ 2	1,350 1,370	16,800 14,400	2 85	18,100 15,900	2,470 1,060	1,120	132
March:	- ==== <u>-</u>	1,370	14,400	63	13,900	1,000	1,120	132
Brazil	- 		2,100		2,100	1		141
Canada	· <u>-</u>		13,200 5		13,200	1,160	476	141
Chile	-	132	1,030		1,160	1,100		
Colombia		197	276		473			
Dominican Republic		197	1		1	518	4	
Honduras		353			353			
Japan								185 5
Mexico	- 	179	42	1	222	62		
Nicaragua	-	59		1 5/	60			
Norway	- 		103		103			
Peru	- 	632	11		643	1		
Other	- 3	15	176		193	178	43	9 5
Total	3	1,570	17,000	2	18,500	1.920	524	335
Year to date	5	4,290	48,100	89	52,500	5,450	2,450	689
Exports:	-	,	-,		, , , , , , ,	-,	,	
2000	745	106,000	440,000		547,000	64,100	1,130	1,390,000
2001:	-	, i	,					
January	41	4,810	43,400		48,300	4,310	19	159,000
February	60	4,900	51,500		56,400	3,900	373	40,700
March:	-	•	<u> </u>			·		<u> </u>
Belgium						247		
Canada		760	25		785	1,730 5	5/ 8	145,000 5
Dominican Republic								435 5/
France			(6/)		(6/)		224	5 5/
Germany			(6/)		(6/)	149	4	1,010 5
Guatemala			104		104			
India							1	
Israel							2	23,700 5
Japan						9	1	
Mexico			3,330		3,330		78 5/	
Peru			494		494			
Switzerland		4,550	46,800		51,300	383	(6/)	
Thailand	<u></u>		1,040		1,040			
Trinidad and Tobago	4				4			
United Arab Emirates			2,970		2,970		4	
United Kingdom	 -	5	6,870		6,870	1,180	6	361 5
Other	5		106		106	110	(6/)	61 5
Total	_ 4	5,310	61,700		67,000	3,810	328	170,000
Year to date	105	15,000	157,000		172,000	12,000	720	370,000

r/ Revised. -- Zero.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Includes gold content of base metal ores, concentrates, and matte imported for refining.

^{3/} Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold excluded.

^{4/ &}quot;Waste and scrap," "Metal powder," and "Gold compounds" not included in "Total."

^{5/} All or part of these data have been referred to the U.S. Census Bureau for verification.

^{6/} Less than 1/2 unit.

TABLE 4 U.S. IMPORTS AND EXPORTS OF SILVER, REFINED AND AS NITRATE 1/

(Kilograms)

Period and country	Bullion (silver content)	Doré (silver content)	Total (silver content)	Other unwrought silver (gross weight)	Metal powder (gross weight)	Silver nitrate (gross weight)
Imports for consumption:	(SHVEI COHICIL)	(SHVCI COHCHE)	(SHVCI COILCIL)	(gross weight)	(gross weight)	(gross weight)
2000	3,810,000	73,900	3,880,000	204,000	235,000	24,200
2001:		75,700	5,000,000	201,000	233,000	21,200
January	268,000	12,900	281,000	12,500	6,380	4,320
February	214,000	29	214,000	20,300	10,500	8,680
March:			211,000	20,500	10,500	0,000
Belgium						4,320
Canada	124,000 2/		124,000	19,800		
Chile		1,020	1,020			
China	2,150		2,150			
Colombia	500		500			
France					700	
Germany	_				200	
Japan					68 2/	
Mexico	113,000		113,000	34,200		
Peru	37,500		37,500			
Other				15 2/	20	
Total	276,000	1,020	277,000	54,000	988	4,320
Year to date	758,000	13,900	772,000	86,700	17,900	17,300
Exports:						
2000	279,000	36,000	315,000	57,500 r/	424,000	217,000
2001:						
January	25,300	420	25,700	681	16,000	16,000
February	19,500	747	20,200	3,640	29,200	20,100
March:			·	·	·	
Canada				342	1,390	17,100
Colombia				2 2/	1,240	
Dominican Republic	-			392		
Finland					746	
France				130	2,060 2/	
Germany				102	5,010	
Italy					110	
Japan	-			27	1,300	
Korea, Republic of					968	
Lebanon					101	
Mexico	3,110		3,110		19,800	675
Singapore					409	
Sweden					99	
Switzerland	<u> </u>	541	541		54	
Taiwan				1,280	2,340	
United Kingdom	19,700	159	19,800	2,310	458	-
Other		19	19	4 2/	33	42
Total	22,800	719	23,500	4,580	36,200	17,800
Year to date	67,500	1,890	69,400	8,900	81,400	54,000

r/ Revised. -- Zero.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown. 2/ All or part of these data have been referred to the U.S. Census Bureau for verification.

${\it TABLE 5} \\ {\it U.S. IMPORTS AND EXPORTS OF SILVER, RAW, SEMIMANUFACTURED, AND WASTE AND SCRAP 1/2} \\$

(Kilograms of silver content, unless otherwise specified)

Decidend accorden	Silver ores and	Base metal ores and	Ash and residues	Total	Semimanu- factured form 2/3/	Waste and scrap
Period and country Imports for consumption:	concentrates	concentrates	residues	Total	(gross weight)	(gross weight)
2000	1,420		55,800	57,200	140,000 r/	1,130,000
2001:			33,800	37,200	140,000 1/	1,130,000
January			2,330	2,330	6,010	40,700
·	_ 					
February	- -		2,310	2,310	7,820	36,200
March: Australia	_		194	194		4
	_ 				7 200	4
Brazil			1 200	1 200	7,300	0.700
Canada Dominican Republic			1,290	1,290	1,320	9,700 274
France					76	365
Germany					1,670	401
Italy					163 4/	(5/)
Japan					126 4/	5
Korea, Republic of					362	63
Malaysia						2,650
Mexico			859	859	99	1,740
Netherlands					41 4/	2,590
Singapore						1,520
United Kingdom			1,580	1,580	279 4/	29,400
Zimbabwe						188
Other					(5/) 4/	186
Total			3,920	3,920	11,400	49,100
Year to date	_		8,550	8,550	25,300	126,000
Exports:	_					
2000	65,100			65,100	148,000 r/	1,670,000
2001:	_					
January	671			671	14,000	119,000
February	29,100			29,100	12,600	107,000
March:						
Belgium					52	22,700
Brazil					960	6,020
Canada	277			277	7,090	110,000
China						13,200
Costa Rica						155
France					377 4/	
Germany					2,390 4/	10,500
Hong Kong	-				251	34
Italy	_ 				364	20,000
Japan	-				2,200 4/	199
Korea, Republic of					154 4/	
Mexico	4,320			4,320	1,340 4/	
Netherlands					816	
Saudi Arabia						238
Singapore	-				50	234
South Africa	-					574
Spain	-				1,570	
Switzerland		<u></u>			67 4/	96
Taiwan		<u></u>			420 4/	
United Kingdom					506 4/	969
Other	_				130 4/	66
Total	4,600			4,600	18,700	185,000
Year to date	_ 4,000 34,300			34,300	45,300	411,000
1 car to date	34,300			34,300	43,300	411,000

r/ Revised. -- Zero.

 $^{1/\}operatorname{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Containing 99.5% or more by weight of silver. Imports only.

^{3/} Semimanufactured (including silver plated with gold or platinum) forms of silver.

^{4/} All or part of these data have been referred to the U.S. Census Bureau for verification.

^{5/} Less than 1/2 unit.

 ${\tt TABLE\,6}\\ {\tt U.S.\,IMPORTS\,FOR\,CONSUMPTION\,OF\,PLATINUM-GROUP\,METALS\,1/}$

(Kilograms of metal content, unless otherwise specified)

unkrought platinum, unkrought platinum, unkrought platinum, unkrought platinum, waste and unkrought platinum, unkrought pl		Platinum		Other		riannum							
Vertical and country Ingesters Sponge Platinum other scrip coins pullsdium other Trideman Platinum Rhod Mary \$550 68,000 3,870 12,100 27 154000 2700 133 20,800 Mary \$61 3,870 144 37 81 5 5,64000 2700 133 20,800 Breath 155 461 78 461 34 461 36 160 28 604 Breath 155 461 78 461 78 160 28 604 Condents 15 6 7 40 27 160 28 604 Condents 1 6 7 40 27 160 28 604 Condents 1 6 7 40 27 160 28 604 State 1 1 4 1 1 2		grain and	Platinum	unwrought	Platinum,	waste and	Platinum	Unwrought	Palladium,		Unwrought	Unwrought	
113 8230 88000 3870 7480 12100 27 154,000 2700 133 20,800 2,20	Period and country	nuggets	sponge	platinum	other	scrap	coins	palladium	other	Iridium 2/	osmium	ruthenium	Rhodium 3/
113 8,320 144 397 881 5 36,900 1,510 167 28 694	2000	2,550	000'89	3,870	7,480	12,100	27	154,000 r/	27,900	2,700	133	20,800	18,200
113 8.3.20 144 397 581 5 6900 1510 167 28 6044	2001:												
1554 3530 147 344 497 3 12300 489 1080 403	January	113	8,320	41	397	581	S	36,900	1,510	167	28	604	914
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	China	!	ı	1	ı	ı	ı	200	;	ı	ı	1	1
1 534	Colombia		I	16	ı	ı	ŀ	;	;	I	ŀ	;	i
1 534 14 184 104 56 59	Estonia	:	ı	1	I	ı	ŀ	10	;	I	ı	;	1
1 534 14 184 104 -	France	;	29	;	ı	ı	ı	;	;	ı	1	1	2
(5) 45	Germany	_	534	14	184	104	I	92	904/	11	1	1	4
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lic of - 3 1 - 1,220 26 - - - lic of - - 1 61 - - - - - - - - - 27 - - - - - - - - - - 27 -	Jamaica	1	ı	1	ı	2	ŀ	;	;	I	1	;	i
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1	Mexico	1	ı	1	I	27	I	;	1	I	ı	1	i
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Compare than three significant digits; may not add to totals shown. Compare the compare that the compare	Russia	1	591	3	I	ı	1	26,800	31	ı	ı	1	23
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March Control of the follows of iridium. March Control of the follows of iridium. March Control of the follows March	South Africa	62	2,750	89	1	ı	I	438 4/	4394/	19	ı	387	226
mm 3 9 59 mm 1,230 40 5 19 4,370 16 159 59 e 835 17,500 723 1,070 1,420 9 89,200 2,720 1,440 28 1,450 the forms of iridium.	Switzerland		1	7	95	1	1	3,140 4/	40	ı	1	1	1
mm 1230 40 5 19 4370 16 159 59 e 218 5,670 432 329 343 1 40,000 721 189 446 e 835 17,500 723 1,070 1,420 9 89,200 2,720 1,440 28 1,450 the forms of iridium. the forms of iridium.	Taiwan	1	1	1	ı	33	1	1	6	I	1	1	1
218 5,670 432 329 343 1 40,000 721 189 446 835 17,500 723 1,070 1,420 9 89,200 2,720 1,440 28 1,450 10 no more than three significant digits; may not add to totals shown.	United Kingdom	1	1,230	40	S	19	I	4,370	16	159	I	89	19
e 835 17,500 723 1,070 1,420 9 89,200 2,720 1,440 28 1,450 1 to no more than three significant digits; may not add to totals shown.	Total	218	5,670	432	329	343	1	40,000	721	189	-	446	995
r/ Revised Zero. 1/ Data are rounded to more than three significant digits, may not add to totals shown. 2/ Unwrought and other forms of iridium.	Year to date	835	17,500	723	1,070	1,420	6	89,200	2,720	1,440	28	1,450	2,020
1/ Data are rounded to no more than three significant digits; may not add to totals shown. 2/ Unwrought and other forms of iridium.	r/ Revised Zero.												
2/ Unwrought and other forms of iridium.	1/ Data are rounded to no mo	ore than three sign	ificant digits	; may not add to	totals showr	نہ							
7/11	2/ Unwrought and other form	s of iridium.											
4/ Intiraliant and Athar tarms At the Administration of the Admini	3												

4/All or part of these data have been referred to the U.S. Census Bureau for verification. 5/Less than 1/2 unit.

TABLE 7 U.S. EXPORTS OF PLATINUM GROUP METALS 1/

(Kilograms of metal content, unless otherwise specified)

Period and country	Palladium 2/	Platinum 2/	Platinum waste and scrap	Iridium, osmium and ruthenium 2/3/	Rhodium 2/
2000	57,900 r/	25,000	7,360 r/	1,480	797
2001:		23,000	7,500 1/	1,460	191
January	3,780	2,270	1,010	227	118
February		1,750	1,110	72	94
March:		1,730	1,110	12	
Australia		11			
Austria	- ²³ 1	7			
Belgium	— 73	4	5		
Bermuda		(4/)			
Brazil		176		(4/)	
Canada	_ 60	273	40	(¬/)	(4/)
China				15	(")
Denmark	8				
Finland	_ 4	6			
France	— 38	121	40	3	69
Germany	955	497	619	1	172
Hong Kong	- 422	13			1
India					(4/)
Ireland	-	13			(4/)
Israel				1	(4/)
Italy		5	4		(4/)
Japan		8	8	1	74
Korea, Republic of		416 5/	8	(4/)	74
Malaysia		1		(4/)	
Mexico	₁₁	8	(4/)	3	(4/)
Netherlands	— 11 18	21	(4/)	1	(4/)
Netherlands Antilles		519 5/		1	
New Zealand		319 3/			
Norway Norway	- '	1			
Philippines					
Saudi Arabia	3 3/	3			
Singapore	4	2			
Slovenia		2			
South Africa			2		
Spain		1			
Sweden		5	(4/)	1	
Switzerland	15 14	9	(4/)	1	
Taiwan	_	9			
		3	-	1	
Thailand Turkey	_			1	(4)
United Arab Emirates		(4/)			(4/)
United Arab Emirates United Kingdom	2 170	3,290	 394	 56	(4/)
	_			82	157
Total Variation data	4,100	5,420	1,110		473
Year to date	16,800	9,440	3,230	381	685

r/ Revised. -- Zero.

^{1/} Data are rounded to no more than three significant digits; may not add to totals shown.

^{2/} Unwrought and other forms.

^{3/} Gross weight.

^{4/} Less than 1/2 unit.

 $^{5/\,}All$ or part of these data have been referred to the U.S. Census Bureau for verification.

TABLE 8 LEADING GOLD-PRODUCING MINES IN THE UNITED STATES, FIRST QUARTER, 2001, IN ORDER OF OUTPUT 1/

Rank	Mine	County and State	Operator	Kilograms
1	Newmont Nevada operations 2/3/	Various counties, NV	Newmont Gold Company	22,500
2	Betze-Post/Goldstrike	Eureka, NV	Barrick Gold Corporation	14,000
3	Cortez	Lander, NV	Placer Dome Inc.	9,200
4	Round Mountain	Nye, NV	Round Mountain Gold Corporation	6,200
5	Meikle/Goldstrike	Eureka, NV	Barrick Gold Corporation	5,000
6	Bingham Canyon 4/	Salt Lake, UT	Kennecott Utah Copper Corp.	4,700
7	Fort Knox 5/	Fairbanks, AK	Fairbanks Gold Mining Inc.	3,100
8	Jerritt Canyon	Elko, NV	Independence Mining Company, Inc.	3,000
9	Ken Snyder	do.	Euro-Nevada Mining Co.	1,800
10	Golden Sunlight	Jefferson, MT	Placer Dome Inc.	1,650
11	Cresson	Teller, CO	Cripple Creek & Victor Gold Mining Co.	1,600
12	Homestake	Lawrence, SD	Homestake Mining Company	1,500
13	Mesquite	Imperial, CA	Newmont Gold Company	1,200
14	Barney's Canyon	Salt Lake, UT	Kennecott Barney's Canyon Mining Co.	1,150
15	Ruby Hill	Eureka, NV	Homestake Mining Company	900
16	McLaughlin	Napa, CA	do.	900
17	Castle Mountain	San Bernardino, CA	Viceroy Resources Corporation	800
18	Wharf	Lawrence, SD	Wharf Resources, Ltd.	800
19	Denton-Rawhide	Mineral, NV	Kennecott Rawhide Mining Co.	800
20	Bald Mountain	White Pine, NV	Placer Dome Inc.	800
21	Greens Creek	Skagway-Hoonah-Angoon, AK	Kennecott Greens Creek Mining Co.	700
22	Briggs	Inyo, CA	Canyon Resources Corp.	700
23	McCoy/Cove	Lander, NV	Echo Bay Mines Limited	700
24	Rochester	Pershing, NV	Coer d'Alene Mines Corp.	600
25	Marigold	Humboldt, NV	Glamis Gold Ltd.	600
26	Rand	Kern, CA	Glamis Rand Mining Co.	400
27	Kettle River	Ferry, WA	Echo Bay Mines Limited	400
XX	Diamond Hill	Broadwater, MT	Diamond Hill Mining Co.	(6/)
XX	Florida Canyon	Lander, NV	Florida Canyon Mining, Inc.	(6/)
XX	Montana Tunnels	Jefferson, MT	Montana Tunnels Mining, Inc.	(6/)

XX Not applicable.

Sources: Company annual reports, Securities and Exchange Commission's 10Q reports, and company news releases.

^{1/} Data are rounded to no more than three significant digits; these mines accounted for more than 92% of the U.S. gold production in 2000.

^{2/} Includes Carlin Mines Complex, Lone Tree, and Twin Creeks.

^{3/} Mill output.

^{4/} Mine production refers to total quantity of gold produced in concentrates.

^{5/} Mine production refers to gold equivalent produced.

^{6/} Production at Diamond Hill, Florida Canyon, and Montana Tunnels are withheld; mine is among the top 30 gold-producing mines in the United States, but are not shown in rank in order to avoid disclosing company propriety data.